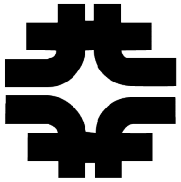

Accelerator Software Support and Development
Project Status Update for 09/05/2006

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Project Deliverables Status for TBPM

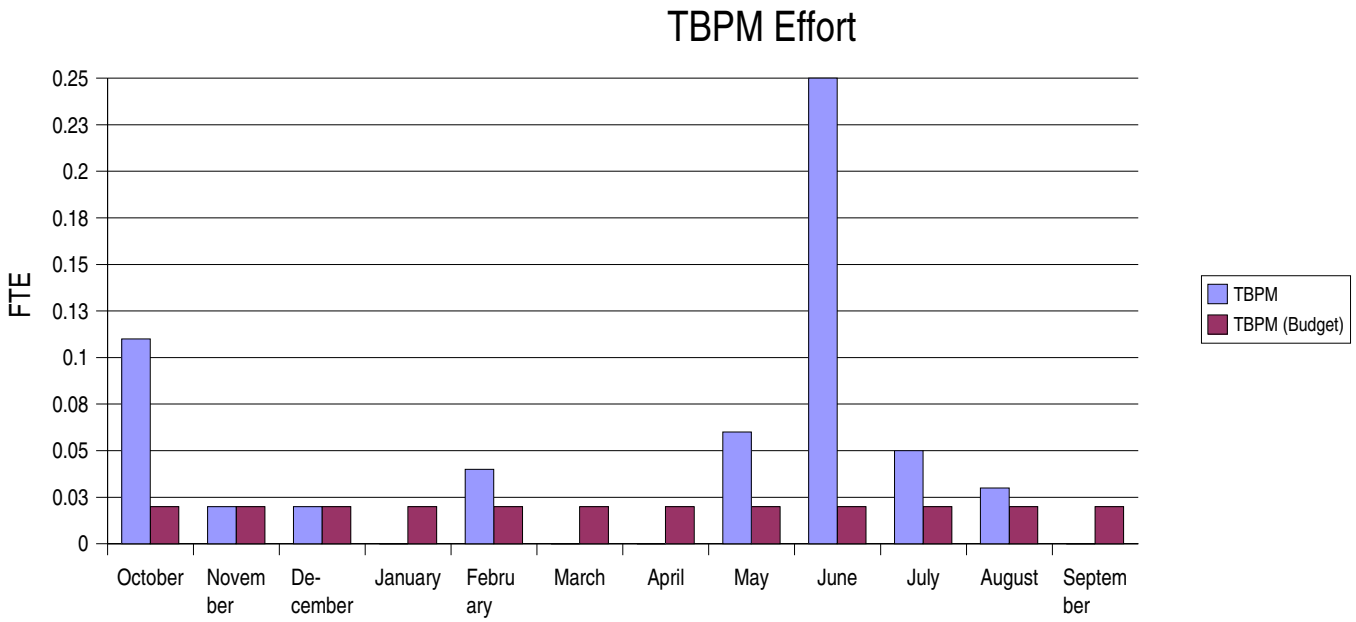
- TBPM
  - Maintenance mode
    - Couple of minor operational problems
    - Alarm devices added for all houses
  - Orbit corrections (limited effort and scope by current agreement)
    - Not a high priority from CD perspective
    - Effort a few weeks so far
    - Apply corrections to the beam based on real time positions from BPMs at B0 and D0
    - Horizontal correction at D0 (tentative) and vertical at B0
    - Software changes completed and deployed at B0 and D0
      - VME DAC board is installed but not yet connected to correctors
      - Correction values are available as ACNET devices, these can be used to check if values are correct

Project Deliverables Status for

- MIBPM
  - Last house installed at the beginning of August
  - Almost all measurements in the requirements document are working
    - Last functionality test: data from all current states needs to be checked
  - Fast time plots now accept any requested rate (was 720 Hz only)
  - Noise in 2.5 MHz measurements may require changes in the software intensity threshold
    - If threshold does not solve problem then a more robust algorithm for finding first and last turn may be needed
    - Effort through September may be required
  - Ongoing discussions about what alarms front-ends should raise
    - Currently front-ends alarm on missing TCLK, MIBS, RRBS, MDAT, RFCLK, failure to initialize timing or EchoTek boards
  - A periodic self-test is being defined and will require changes in the front-ends
  - Small front-end code change expected when transition boards and timing board add new functionality to set individual gains and read back values

Effort Profile TBPM Support and Development

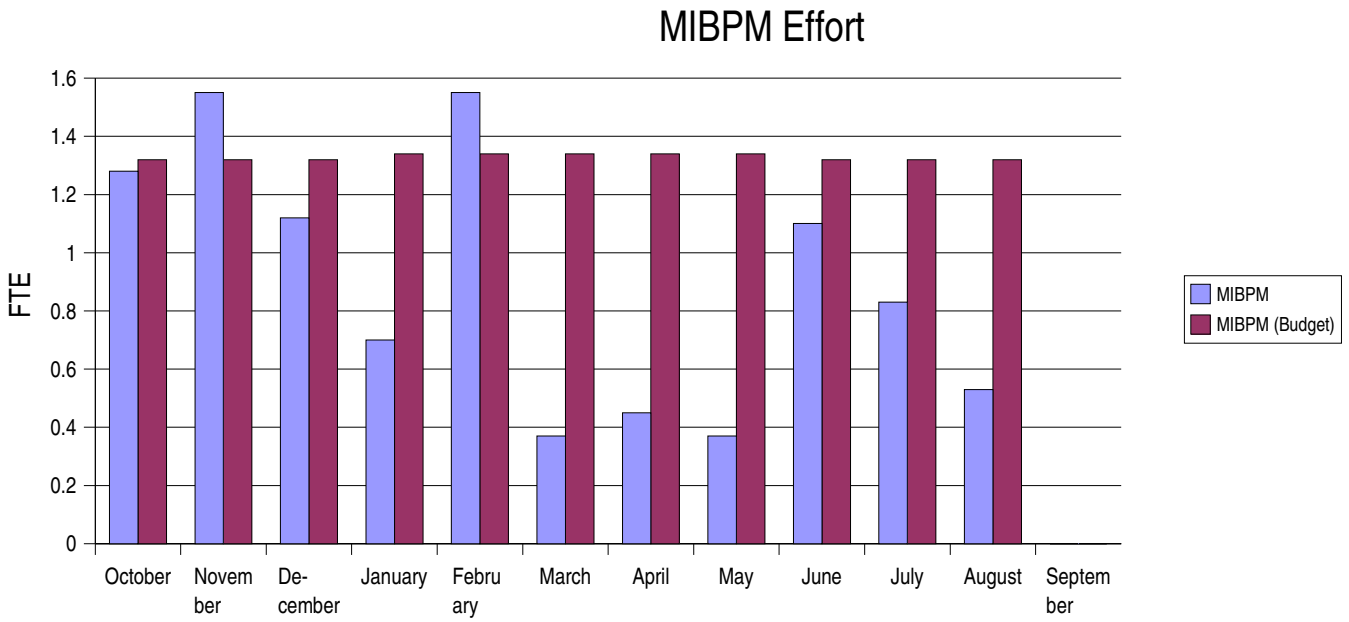
- Software: 1 employee in CEPA/OAA for TBPM



- TBPM: Request for software development for orbit correction calculation in the front ends and signal to corrector elements.

Effort Profile MIBPM Support and Development

- Software: 2 employees in CEPA/OAA for MIBPM

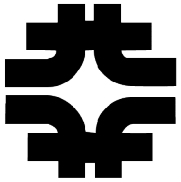


Risks

- TBPM
  - MVME2400: end of lined this year (27 houses, 10% spares)
    - Software can quickly be ported to MVME5500 (MIBPM)
  - Introduction of bugs with the new feature

- MIBPM
  - Handling all possible MI states not tested
  - First and last turn issue could be difficult to resolve

Additional Slides



Main Injector Beam Position Monitor (MIBPM)